

## ABSTRACT OF THE DISCLOSURE

Techniques are provided for creating a Cyclic Redundancy Check generator in a system. According to one aspect of the invention, a universal N-bit capable CRC generator is created and programmed to adapt to any given polynomial key word. According to one feature, the N-bit capable CRC generator comprises N shift registers that are associated with corresponding exclusive-OR gates (XOR gates). Each of the shift registers corresponds to a term of an imaginary  $N^{\text{th}}$  order polynomial. Thus, by nullifying a subset of the shift registers and their corresponding XOR gates, the N-bit capable CRC generator can be converted into a specific polynomial key word CRC generator. The selection of the subset of the shift registers and their corresponding XOR gates is based on the desired polynomial key word. The N-bit capable CRC generator can be re-programmed each time a new polynomial key word is desired.